



UNITED STATES MARINE CORPS  
MARINE CORPS AIR STATION  
PSC BOX 8003  
CHERRY POINT, NORTH CAROLINA 28533-0003

AirStaO 13830.2L  
SUB7  
29 Jun 95

AIR STATION ORDER 13830.2L

From: Commanding General  
To: Distribution List

Subj: STANDARD OPERATING PROCEDURES FOR THE HIGH-SPEED REFUELING  
SYSTEM

Ref : (a) NAVAIRINST 10340.3B (NOTAL)  
(b) NAVAIR 00-80T-109 (NOTAL)  
(c) ABO 10340.23  
(d) NAVAIR 00-80R-14 of Jul 78 (NOTAL)

1. Purpose. To provide standard operating procedures for the high-speed refueling system.

2. Cancellation. AirStaO 13830.2K.

3. Information. The Supply Directorate is assigned responsibility for the operation and maintenance of the high-speed refueling system aboard Marine Corps Air Station, Cherry Point. Reference (a) establishes the standards for quality surveillance of aviation fuels. Reference (b) outlines procedures for the safe handling, dispensing, quality control of aircraft fuel, and hot refueling of aircraft.

4. Exclusion. Procedures for providing fuel to transient aircraft are not included in this Order but are covered in reference (c).

5. Summary of Revision. Revision is being made to update the list of references and to incorporate Change 1. Minor word changes have been made to paragraphs 6a, 6b, and 6d. Paragraph 80 has been changed to add the Desk Sergeant with the authority to secure all refueling operations during electrical storms, the responsibility to notify the Tank Farm Foreman, and to identify the telephone extension of the Tank Farm Foreman. Paragraph 10b is changed to allow the island operator to secure refueling operations if a discrepancy is noted in safe handling practices. Paragraph 10b(1) is changed to require the island operator to ensure the discrepancy is corrected before the meter is reset and activating the dead-man handle. Paragraph 12 is changed to update and identify proper accounting procedures.

6, Definitions

a. Refuelins Point. One Pane of an island capable of servicing one aircraft with engines shut down or with its engines

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running.

b. Island. Contains one or two refueling points or lanes. Islands one through five make up section 1, islands six through nine make up section 2, and islands 10 through 15 (cargo area) make up section 3.

c. Island/Station Operator. That individual responsible for the operation of a unit. This operator must be qualified by MOS (1391).

d. Unit. Pantograph and hose complex capable of servicing aircraft.

e. Hot Refueling. The actual refueling of aircraft while engines are operating.

f. Section Leader. The senior Bulk Fuel Specialist (MOS 1391) responsible for a group of islands.

g. Coordinator. That individual assigned by the responsible squadron to direct movement of the aircraft, normally the plane captain.

h. Leader. That individual assigned by the responsible squadron to perform necessary aircraft checks and handle the refueling nozzle during refueling operations.

## 7. Responsibilities

a. Commanding Officers of Marine Aircraft Groups (MAGs) and individual squadrons assigned operational use of one or more refueling points shall provide sufficient line personnel to handle aircraft chocks, tow tractors, auxiliary power units if required, and coordinators for aircraft entering and leaving all refueling points. Commanding Officers will also ensure that one coordinator, one leader, and one aircraft pilot are assigned to each aircraft during a hot refueling operation. The aircraft pilot is not required during cold refueling operations.

b. The Facilities Directorate is responsible for all major repairs and maintenance of the high-speed refueling system.

### c. Supply Directorate

(1) The Director of Supply is responsible for the operation, inventory, accountability, inspection, and quality control of fuel delivered in accordance with the instructions contained in references (a) and (b).

(2) The designated Noncommissioned Officer in Charge (NCOIC) of the Fuel Department will supervise and be responsible for the

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operation and assignment of individual section leaders, island operators, and other personnel to their respective work areas.

(3) The section leaders will be responsible for refueling operations within their areas and will be assigned island operators based upon refueling demands and availability of personnel.

(4) Fuel Distribution System Inspector will ensure that the following quality control measures are accomplished daily:

(a) Drain free water from the filter separators prior to the commencing of refueling operations.

(b) Recirculate fuel throughout the system utilizing the filter separator bank located at tank farm "A" prior to commencing refueling operations.

(c) Draw weekly samples of fuel from each unit and inspect for contamination using established test procedures.

8. Safety Precautions. All general precautions pertaining to the handling of aircraft fuel shall be adhered to within the refueling area by all personnel. The following general safety rules shall apply:

a. Before refueling starts, all equipment will be inspected and defective equipment replaced. Pressure nozzles will be inspected and tested under normal operating pressures. Fire extinguishers of the type and quantity required will be positioned for use as prescribed in reference (d).

b. Acceptable footwear for refueling personnel will be limited to standard non-sparking safety shoes.

c. Loose metal objects, i.e., knives, keys, lighters, or other objects which may produce sparks, will not be carried by fuel personnel outside of designated areas.

d. Hearing protective devices will be worn by all personnel in the refueling area.

e. Smoking in other than the designated areas is strictly prohibited. Open flames within 100 feet of any fueling operation is prohibited.

f. All fighter aircraft will be checked for hot brakes prior to entering into the refueling pits. Pilots of cargo aircraft will verify to the control tower by radio prior to entering the cargo aircraft refueling area that the brake temperature instrument is reading normal. If the reading is other than normal, it will be

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reported to VAL who will report the other than normal brake temperature reading to the Rapid Jet operator on duty at the cargo aircraft refueling area.

g. Breathing of fuel vapors for prolonged periods must be avoided.

h. Fuel which contacts the skin should be removed immediately with soap and water.

i. Clothing which becomes saturated with fuel should be removed immediately.

j. Fuel spills require immediate cleanup with absorbent material. All fuel spills will be reported in accordance with established procedures.

k. Prior to entering the refueling area all non-essential electronic equipment will be secured with the exception of necessary radio equipment.

l. Maintenance on aircraft during refueling is prohibited.

m. Refueling operations will not commence until all equipment is properly grounded.

n. Grounding connections will be clean, unpainted, and in good condition.

o. In case of electrical storms in the area, the NCOIC or Desk Sergeant of the high-speed system, will secure all refueling operations and notify the Operations Duty Officer (extension 3632), and the Tank Farm Foreman at extension (5022).

#### 9. Aircraft Handling Instructions

a. The high-speed refueling system is assigned to expedite refueling of aircraft. Cold refueling (aircraft engines shut down) or hot refueling (aircraft engine idling) can be accomplished. This system is not designed for and will not be used to defuel aircraft.

b. A painted line leading to each unit is used as a guide for the nose wheel of each aircraft.

c. During cold refueling, a maximum of four aircraft can park in each island provided that tow tractors are readily available for removal of the aircraft. A minimum separation of 50 feet must be maintained between such aircraft.

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d. During hot refueling, only one aircraft per unit is authorized. Additionally, aircraft will await a vacancy on the taxi strip nearest their station. Waiting aircraft will keep engines running and allow sufficient room for other aircraft to pass. At no time will aircraft shut down on the taxi strip.

e. All aircraft will be checked for ordnance and hot brakes prior to entering the refueling island. Planes with any ordnance capable of detonation will not enter into the refueling area. Inert ordnance (i.e., blue bombs, dummy ordnance, etc.) are exempt but must be pinned prior to entering. Hot refueling of aircraft with explosive ordnance on board is not authorized under Defcon 5 conditions.

f. On all refuels at least one rapid jet personnel will be on hand to assist the normal aircraft ground crew.

g. All aircraft will be chocked and grounded prior to attaching the pressure nozzle.

#### 10. Duties of Operating Personnel

a. Section Leader. The section leader must thoroughly understand the signals used by squadron personnel in the refueling operation. The section leader will check all equipment daily before refueling operations begin. During operations, the section leader will constantly check both island operators and ground crew personnel to ensure that all safety rules are being complied with. The section leaders are responsible for the correct accounting of fuel issues from their section and will ensure quality control procedures are complied with. In addition, the section leader will also accomplish the following:

(1) Prior to refueling an aircraft, ensure that:

(a) Islands are manned by the required number of personnel.

(b) Aircraft being refueled have been checked and do not have hot brakes.

(c) Wheels are properly secured (chocked).

(d) Grounding procedures are adhered to.

(2) The section leader will secure operations when:

(a) The safety of the operations is in doubt.

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(b) Fuel spillage occurs.

(c) Insufficient numbers of personnel are on duty.

b. Island Operator. The island operator is directly responsible for the operation of all valves, motors, and hose levers on his/her assigned refueling unit. Nozzles will be checked for leaks and defects, meter readings will be taken, and fuel will be recirculated through the system prior to commencing daily refueling operations. The island operator must know all hand signals needed during the refueling operation and will ensure that all safety rules are being complied with. If a discrepancy is noted in the safe handling practices, the island operator will secure refueling operations and close all shut-off valves. Specific duties are as follows:

(1) To commence the fueling operation, the island operator will ensure the discrepancy is corrected and that the meter is reset to zero before activating the deadman handle.

(2) Upon completion of each refueling operation, the amount of the fuel delivered will accurately be entered on the prescribed documents. The initials of the plane captain will be obtained for verification of amounts received.

c. Plane Captain/Coordinator. Plane captains are assigned by squadrons being serviced and will represent respective squadrons in all functions relating to their aircraft. These functions will include the following:

(1) Ensure that the nozzle(s) being used is(are) appropriately manned at all times.

(2) Hoses and nozzles are carefully handled and returned for proper storage at the conclusion of refueling.

(3) Maintenance is not performed in the refueling area.

(4) All aircraft are disarmed and checked before refueling commences.

(5) Other interest and responsibilities are:

(a) A thorough knowledge of all applicable instructions on aircraft refueling.

(b) Discontinue operations when safety is in question.

(c) Discontinue refueling and assist in cleanup when fuel spills occur.

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- (d) Positioning of aircraft on refueling points.
  - (e) Ensure ground crew has properly grounded and chocked aircraft.
  - (f) Ensure pressure nozzles are properly connected.
- (6) In the event of an actual fire, the plane captain shall further:
- (a) Have the affected aircraft cleared from the unit if possible.
  - (b) Safely effect the removal of all other aircraft from the danger area.
  - (c) Assist in attempts to contain or confine the fire until the proper professionals arrive.
- (7) Prior to commencing hot refueling operations, the plane captain shall ensure the following personnel are available:
- (a) One nozzle operator
  - (b) Pilot
  - (c) Island operator
- (8) The plane captain shall signal the island operator to start and stop refueling. He/she will then ensure the following:
- (a) Hose and ground wire are properly removed.
  - (b) Verify amounts recorded by island operator.
- d. Nozzle Operator. Under the direction of the plane captain, the nozzle operator will handle the refueling hose and properly attach and operate the pressure nozzle. The operator will close the nozzle lever when the aircraft has been refueled, but he will not remove the nozzle until the island operator gives the signal for its removal. In conclusion, the nozzle operator will carefully remove the nozzle and return it to the pantograph tray. If fire occurs, the operator will remove the nozzle and move the pantograph to a safe area, then assist in operating the fire extinguishers.
- e. Quick Service Supervisor (QSS). The Quick Service Supervisor (QSS) will be the senior Marine on duty at the Rapid Jet Section. The QSS will be responsible for the concurrent loading and unloading of cargo while fueling is in progress. The QSS will remain on site the entire time refueling is in progress. Passengers may remain on

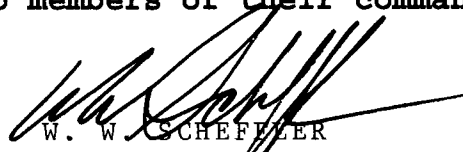
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board the aircraft during refueling operations if a crash fire rescue truck is on standby at the refueling site. It may be necessary to enplane or deplane passengers during refueling. If such extreme measures are necessary, it is recommended that it be contingent upon additional authorization of the Commanding Officer or his command duty officer.

11. Maintenance. Maintenance beyond the capability of assigned maintenance personnel will be referred to the Facilities Maintenance Department. When a new hose, or one which has dried out through non-use, is placed in service, a discoloration of fuel will occur; the NCOIC will ensure that these hoses are thoroughly recirculated with a minimum of 500 gallons of product each day before any fuel is issued to aircraft.

12. Accounting. For all visiting aircraft using the high-speed refueling pits, a DD 1898 will be used. This form will be filled out by the Island Operator. At the end of each day, the DD 1898's will be forwarded to the Fuel Department Office and adjustments will be made to the Stock Balance cards. A running tally (7 day report) is used for tenant aircraft only. At the end of each week, representatives from MALS 14 will liquidate all outstanding fuel accounts for the previous weeks issues.

13. Concurrences. The Commanding General, 2d Marine Aircraft Wing and the Commanding Officer, Naval Aviation Depot concur with this Order insofar as it pertains to members of their commands.

  
W. W. SCHEFFLER  
Chief of Staff

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